

REMARKS

The present Amendment amends claims 7-9, 16, 17, 21, 23 and 28-31 and leaves claims 18, 22, 24-27, 32 and 33 unchanged. Therefore, the present application has pending claims 7-9, 16-18 and 21-33.

The Examiner is strongly urged to contact Applicants' Attorney, the undersigned so as to conduct an interview prior to examination of the present application.

Claims 7 and 9 stand objected to due to informalities noted by the Examiner. Amendments were made to claims 7 and 9 to correct the informalities noted by the Examiner. Therefore, this objection is overcome and should be withdrawn.

Claims 7, 9, 16, 17, 21-31 and 33 stand rejected under 35 USC §102(b) as being unpatentable over Yoshinaka (U.S. Patent No. 5,384,787). This rejection is traversed for the following reasons. Applicants submit that the features of the present invention as now more clearly recited in claims 7, 9, 16, 17, 21-31 and 33 are not taught or suggested by Yoshinaka whether taken individually or in combination with any of the other references of record. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

Amendments were made to the claims in order to more clearly describe features of the present invention not taught or suggested by any of the references of record particularly Yoshinaka. Particularly, amendments were made to the claims to more clearly recite that the present invention is directed to a data transmission and data reception method and apparatus for transmitting and receiving information data containing additional information

data. The operation of the present invention is conducted at the transmitter side and includes preparing data frames of the information data into which the additional information data is to be embedded, altering at least a part of each data frame in accordance with predetermined patterns corresponding to the additional information data to be embedded, as an electronic watermarks, into the data frame repetitively and separately at different positions in said data frames as illustrated, for example, in Fig. 4 of the present application and transmitting the information data embedded at different positions in said data frames with the repetitive and separate additional information data. At the receiver side the information data, embedded with the additional information data, is received.

The above described features of the present invention now more clearly recited in the claims are not taught or suggested by any of the references of record, particularly Yoshinaka, whether taken individually or in combination with each other.

Yoshinaka teaches a recording system which includes an A/D converter 2 supplied with an input video signal through a signal input terminal 1, a coding processing unit 3 supplied with picture data digitized by the A/D converter 2, and a recording data processing unit 4 supplied with a coded output by the coding processing unit 3, etc. to deliver recording data obtained by the recording data processing unit 4 to a magnetic head 5 to record it onto a magnetic tape 6. In Yoshinaka the coding processing unit 3 compresses picture data of 800 times 400 bytes/frames to, e.g., one fourth thereof to deliver, to the recording data processing unit 4, picture data (variable length

coded data) of the predetermined target data quantity

$(800 \times 400) / 4 = 80000$ bytes/frames (1600×50 bytes/frames).

Yoshinaka further teaches that in the recording data processing unit 4, the ID adding circuit 41 is supplied with picture data coded by the coding processing unit 3 and an identification code (ID) indicating its quantization step width is included in the ID signal added to the picture data. As per Yoshinaka, in the frame memory 42, picture data of one frame in which the identification code (ID) is added, by the ID adding circuit 41, is written.

Although, as indicated above, there is a teaching in Yoshinaka that an ID adding circuit 31 adds an ID signal to the picture data, this ID signal as taught by Yoshinaka is merely concerned with indicating the quantization step width. There is no teaching or suggestion at any point in Yoshinaka that the ID signal being added by the ID adding circuit 41 is identification information which is embedded or concealed in the information data as an electronic water mark so as to be used for identifying, for example, the validity of the data or to supply hidden control information to a receiver as in the present invention as recited in the claims.

Further, there is no teaching or suggestion in Yoshinaka as to how and at what point the ID signal is added to the picture data nor that the ID signal is added to the frame repetitively at numerous locations as in the present invention as recited in the claims in order for Yoshinaka to at least be related to the features of the present invention as now more clearly recited in the claims.

According to the present invention as now more clearly recited in the claims the additional information is not added but is embedded repetitively

and separately at different positions in the data frame such as, for example, illustrated in Fig. 4 of the present application. As per Fig. 4 it is clear that the additional information is embedded within the pixel blocks of the data frame at repetitively and at a multiple of different locations in the data frame.

The above described features of the present invention allow for the additional information to be protected from deterioration through transmission. In order to understand these features of the present invention attention is directed to a description of the problem to which the present invention is intended to solve on page 2, lines 6-19 of the present application. The apparatus taught by Yoshinaka is not intended to solve the problem to which the present claimed invention is directed. Accordingly the present invention as recited in the claims are not taught or suggested by Yoshinaka.

Thus, Yoshinaka fails to teach or suggest performing steps at the transmitter side including preparing a data frame of the information data into which the additional information data is to be embedded and embedding the additional information data plural times into the data frame, as an electronic watermark, repetitively and separately at different positions in the data frame as recited in the claims.

Further, Yoshinaka fails to teach or suggest performing steps at the transmitter side including transmitting the data frame of the information data embedded at different positions in the data frame with the repetitive and separate additional information data as recited in the claims.

Therefore, Yoshinaka fails to teach or suggest the features of the present invention as now more clearly recited in the claims. Accordingly,

reconsideration and withdrawal of the 35 USC §102(b) rejection of claims 7, 9, 16, 17 and 21-31 is respectfully requested.

Applicants acknowledge the Examiner's indication in the Office Action that claims 8, 18 and 32 are allowed. Applicants submit that claim 9 is also now allowable since it was amended to depend from allowed based claim 8.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the references utilized in the rejection of claims 7, 9, 16, 17, 21-31 and 33.

In view of the foregoing amendments and remarks, applicants submit that claims 7-9, 16-18 and 21-33 are in condition for allowance. Accordingly, early allowance of claims 7-9, 16-18 and 21-33 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (520.36525CX1).

Respectfully submitted,

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